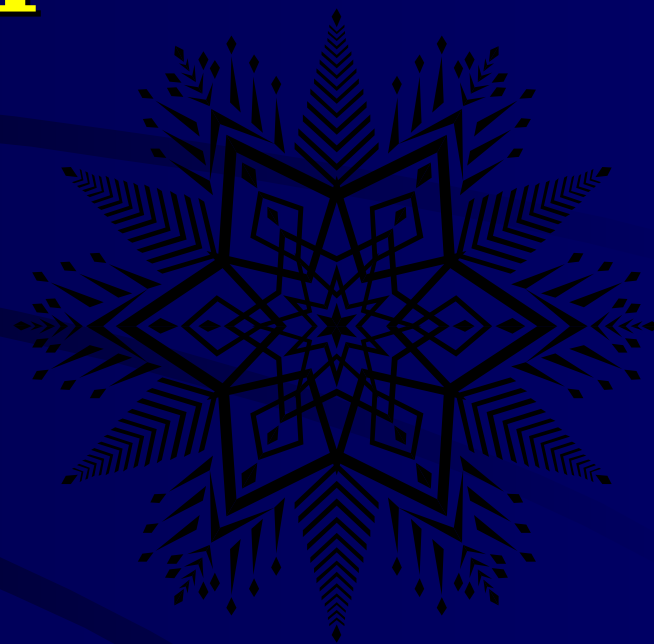
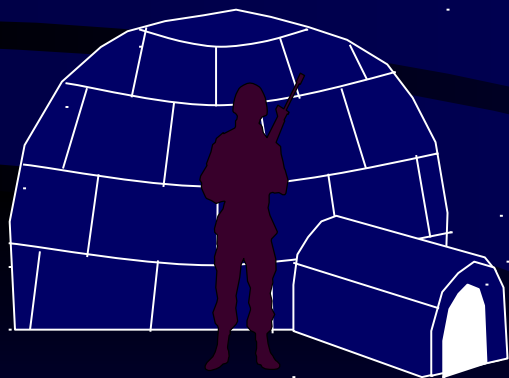


COLD WEATHER SAFETY



TERMINAL LEARNING OBJECTIVE

The soldier will, without references, state the general cold weather injury symptoms, treatment for, and basic preventive measures used for cold weather operations in accordance with (IAW) FM 21-76, FM 31-70, FM 90-11 and TC 21-3.

ENABLING LEARNING OBJECTIVE

The soldier will, without references, be able to identify symptoms for hypothermia, and state the treatment and countermeasures IAW TC 21-3 and FM 31-70.

HYPOTHERMIA

Description - The lowering of the body's inner core. Body loses heat faster than it can generate it.

- **Symptoms**

- Shallow breathing or absence of breathing.
- Faint or undetectable pulse.
- Victim is first cold, then stops shivering.
- Loss of feeling.
- Poor coordination.
- Impaired speech.

HYPOTHERMIA

Description - The lowering of the body's inner core. Body loses heat faster than it can generate it.

- **Treatment**

- Prevent any further heat loss.
- Get victim out of the wind and into the best shelter available.
- Replace any wet clothing with dry, and place victim into sleeping bag, if one is available
- Place as much insulation as possible between victim and ground

HYPOTHERMIA

Description - The lowering of the body's inner core. Body loses heat faster than it can generate it.

- **Treatment**

- Add heat to victim's neck, groin, and sides of chest
- Give warm, nutritious drink if conscious
- **DO NOT** massage victim
- **DO NOT** give alcohol to the victim
- Evacuate to nearest medical facility as soon as possible

HYPOTHERMIA

NOTE: Alcohol is not a useful fuel. The body will burn alcohol, but at the same time it will short circuit the automatic reflex which reduces blood flow to the extremities.

NOTE: This condition is **life-threatening** until normal body temperature is restored.

HYPOTHERMIA

Description - The lowering of the body's inner core. Body loses heat faster than it can generate it.

- **Countermeasures**

- Stay physically fit
- Keep active
- Wear clothes properly and keep it dry (COLDER)
- Eat properly and often
- Drink at least 3.5 quarts of water per day

ENABLING LEARNING OBJECTIVE

The soldier will, without references, be able to identify symptoms for hypothermia, and state the treatment and countermeasures for it IAW TC 21-3 and FM 31-70.

DEHYDRATION

Description - Dehydration can cause serious physical problems and make you more susceptible to other problems, such as frostbite and hypothermia.

- **Symptoms**

- Red indicates a severe condition needing immediate medical evacuation.
- Lack of appetite.
- Dry mouth, tongue, and throat.
- Stomach cramps and/or vomiting.
- Headaches.

DEHYDRATION

Description - Dehydration can cause serious physical problems and make you more susceptible to other problems, such as frostbite and hypothermia.

- **Treatment**

- Keep victim warm
- Give plenty of liquids
- Make victim rest

DEHYDRATIO N

Description - Dehydration can cause serious physical problems and make you more susceptible to other problems, such as frostbite and hypothermia.

- **Countermeasures**

- The minimum daily liquid requirement is 3.5 quarts per day.
- By the time you feel thirsty you are already dehydrated.
- Drink whenever possible, especially during halts.
- Fill canteens at every opportunity.
- During periods when water is scarce, do not drink coffee in large quantities.

ENABLING LEARNING OBJECTIVE

The soldier will, without references, be able to identify symptoms for trench / immersion foot, and state the treatment and countermeasures for it IAW TC 21-3 and FM 31-70.

TRENCH / IMMERSION FOOT

Description - Injuries caused by the prolonged exposure of the skin to cold or wet conditions.

- **Symptoms**

- Feet and toes are cold, numb, and still (early stages)
- Walking becomes challenging
- The feet swell and become painful

TRENCH / IMMERSION FOOT

Description - Injuries caused by the prolonged exposure of the skin to cold or wet conditions.

- **Treatment**

- In early stages keep the feet dry, clean, and exposed to the air.
- In later stages evacuate victim to a medical facility.

TRENCH / IMMERSION FOOT

Description - Injuries caused by the prolonged exposure of the skin to cold or wet conditions.

- **Countermeasures**

- Change to dry socks at least twice daily
- Dry and massage your feet regularly with foot powder
- Wear VB boots and change socks and wipe dry inside of boots regularly
- If leather boots are worn, dry them whenever possible

ENABLING LEARNING OBJECTIVE

The soldier will, without references, be able to identify symptoms for snow blindness, and state the treatment and countermeasures for it IAW TC 21-3 and FM 31-70.

SNOW BLINDNESS

Description - Snow blindness is caused by ultraviolet and ultrablue rays of the sun being reflected from snow covered surface into the eyes. This condition is more likely to occur in cloudy weather.

- **Symptoms**

- A scratchy, gritty feeling under your eye lids
- Redness and watering of the eyes
- A headache

SNOW BLINDNESS

Description - Snow blindness is caused by ultraviolet and ultrablue rays of the sun being reflected from snow covered surface into the eyes. This condition is more likely to occur in cloudy weather.

- **Treatment**

- Blindfold, covering both eyes of the patient using dark cloth.
- Reassure patient. Not a good feeling being without sight.
- Evacuate the patient to a medical facility.

SNOW BLINDNESS

Description - Snow blindness is caused by ultraviolet and ultrablue rays of the sun being reflected from snow covered surface into the eyes. This condition is more likely to occur in cloudy weather.

- **Countermeasures**

- Wear issued sunglasses (ND-15)
- Make slit glasses from cardboard, thin wood, tree bark, MRE packaging material, etc.

ENABLING LEARNING OBJECTIVE

The soldier will, without references, be able to identify symptoms for carbon monoxide poisoning, and state the treatment and countermeasures for it IAW TC 21-3 and FM 31-70.

CARBON MONOXIDE POISONING

Description - The possibility exists whenever a stove, fire, gasoline heater, or internal combustion engine is used indoors.

- **Symptoms**

- Headache, dizziness, confusion, yawning, weariness, nausea, and ringing in the ears.
- Bright red color on lips and skin.
- Victim may become drowsy and collapse suddenly.
- If personnel are found unconscious in an enclosed shelter, carbon monoxide poisoning should be suspected.

CARBON MONOXIDE POISONING

Description - The possibility exists whenever a stove, fire, gasoline heater, or internal combustion engine is used indoors.

- **Treatment**

- Move the victim to open air.
- Keep the victim still and warm.
- If the victim is not breathing, administer mouth to mouth resuscitation.
- Administer cardiopulmonary resuscitation, if necessary.
- Immediately evacuate victim to the nearest medical treatment facility.

CARBON MONOXIDE POISONING

Description - The possibility exists whenever a stove, fire, gasoline heater, or internal combustion engine is used indoors.

- **Countermeasures**

- Use stoves and lanterns in well ventilated areas and tents.
- Ensure that stoves and lanterns are functioning properly.
- Do not let personnel warm themselves by engine exhaust.
- Always have windows cracked in vehicles with a heater in use.
- Use a tent guard or shut the stove off when sleeping.

ENABLING LEARNING OBJECTIVE

The soldier will, without references, be able to identify symptoms for frostbite, and state the treatment and countermeasures for it IAW TC 21-3 and FM 31-70.

FROSTBITE

Description - Frostbite results when tissues freeze from exposure to temperatures below 32° F. The degree of injury depends upon the wind-chill factor, length of exposure time, and proper protection.

- **Symptoms** (*Superficial frostbite*)
 - Tingling, stinging, aching sensation, or cramping.
 - Skin first turns red and then becomes pale gray or waxy white.
 - Blister formation occurs 24 to 30 hours after exposure, followed by flaking of superficial skin.

FROSTBITE

Description - Frostbite results when tissues freeze from exposure to temperatures below 32° F. The degree of injury depends upon the wind-chill factor, length of exposure time, and proper protection.

- **Symptoms** (*Deep frostbite*)
 - Loss of feeling occurs in the affected area, leaving it pale yellow and waxy looking.
 - When frostbitten area thaws, it is painful.
 - Frozen tissue may feel solid or “wooden” to the touch.
 - When exposed to inside temperatures, blisters may appear in 12 to 36 hours.
 - Discoloration (red-violet) appears 1 to 5 days after injury.
 - Gangrene usually results.

FROSTBIT E

Description - Frostbite results when tissues freeze from exposure to temperatures below 32° F. The degree of injury depends upon the wind-chill factor, length of exposure time, and proper protection.

- **Treatment**

- Determine if frostbite is superficial or deep.
- If deep frostbite present **DO NOT** try to thaw affected area.
- Move casualty to warm and sheltered area.
- **Do not** rub the frostbitten area with snow or apply cold water soaks.

FROSTBITE

- **Treatment**

- Do not re-warm the affected area by massaging or exposing it to open fire.
- Re-warm the face, nose or ears by placing your hands on the frozen area.
- Loosen tight clothing and remove jewelry.
- Re-warm feet by removing the boots and socks. Place the bare feet under the clothing against the abdomen of a buddy. Once feet are warmed put on dry socks and boots.

FROSTBITE

- **Treatment**

- Improve circulation by exercise.
- Deep frostbite: If possible, do not allow the victim to walk if his feet are frozen and avoid treating or thawing the affected area.
- Protect frozen tissue from further cold or trauma, and evacuate the casualty to the nearest medical treatment facility.

FROSTBITE

Description - Frostbite results when tissues freeze from exposure to temperatures below 32° F. The degree of injury depends upon the wind-chill factor, length of exposure time, and proper protection.

- **Countermeasures**

- Do not wear tight boots and socks.
- Use the “buddy system” to check exposed areas.
- Carry extra socks and mitten liners.
- Do not stay still for long periods.
- Use extra caution when cold and wind are combined.
- Check feet during halts.

SUMMARY

- Hypothermia
- Dehydration
- Trench foot / immersion foot
- Snow blindness
- Carbon monoxide poisoning
- Frostbite

QUESTIONS?